

Title (en)
Inverter for electric vehicle.

Title (de)
Wechselrichter für Elektrofahrzeug.

Title (fr)
Onduleur pour véhicule électrique.

Publication
EP 0555773 A1 19930818 (EN)

Application
EP 93101749 A 19930204

Priority
• JP 5666092 A 19920207
• JP 15406692 A 19920427

Abstract (en)
An inverter converting by using semiconductor power switching devices a DC voltage supplied from a main battery to an AC voltage supplied to an AC motor Unipolar switching devices such as MOSFETs (210 - 213) are used as the power switching devices. The power switching devices are controlled so that the output voltage of the inverter is composed of pulses taking three levels in the operation range of high output power. This makes it possible to reduce the stationary loss and switching loss of the switching devices, and to increase the efficiency of the inverter. <IMAGE>

IPC 1-7
B60L 11/18; H02M 7/48

IPC 8 full level
B60L 11/18 (2006.01); **H02M 7/48** (2007.01); **H02M 7/487** (2007.01)

CPC (source: EP KR)
B60L 50/51 (2019.02 - EP KR); **H02M 7/487** (2013.01 - EP); **B60L 2210/46** (2013.01 - KR); **B60Y 2200/91** (2013.01 - KR)

Citation (search report)
• [A] FOURTH INT. CONF. ON ELECTRONICS AND VARIABLE-SPEED DRIVES 17 July 1990, LONDON pages 98 - 103 STEINKE 'PWM control of three-level inverter'
• [A] IEEE TRANSACTIONS ON INDUSTRY APPLICATIONS vol. 1A-17, no. 5, September 1981, NEW YORK US pages 518 - 521 AKIRA NABAE ET AL. 'A new neutral-point-clamped pwm inverter'
• [X] PROCEEDINGS OF THE 30TH ANNUAL CONFERENCE OF THE IEEE VEHICULAR TECHNOLOGY SOCIETY September 1980, DEARBORN MICHIGAN pages 1 - 7 STEVEN GEPPERT 'AC propulsion system for an electric vehicle'

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DOCDB simple family (application)
EP 93101749 A 19930204; CA 2088651 A 19930202; DE 69310780 T 19930204; KR 930001436 A 19930203